



Detection system 39 is arranged in the far field of information layer 23, i.e. the detection system is located in a plane where the various diffraction orders of the beam from the information layer are sufficiently separated, in other words, in a plane which is disposed sufficiently far from the image of the information layer formed by objective system 30, 31 and collimator lens 29. Figure 3 shows a plan view of the detection system. The detection system comprises two concentric detectors split along a dividing line 50, giving two inner detectors 51, 52, and two outer detectors 53 and 54. The direction of the dividing line is perpendicular to the effective track direction. The effective track direction is the direction of the track currently being scanned on the record carrier as seen on the detection system through the optics between the detection system and the information layer comprising the track. The diameter of the inner detectors depends on the radius of the spot formed by radiation beam 38 on the detector surface. The diameter is preferably in a range from 50% to 80% of the spot diameter, and more preferably about 70%.

In the Claims

Please replace claims 2, 3 and 8, and add new claims 12-18 as indicated. The changes to the claims may be found on the attached sheets.

2. (Amended) Device according to Claim 1, the detection system comprises four consecutive sub-detectors a, b, c and d in the direction of the scan line, and the signal is proportional to

$$t(a-b) - t(c-d),$$

where $t(n-m)$ is the time difference between detector signals of sub-detectors m and n.

3. (Amended) Device according to Claim 1, the detection system comprises four consecutive sub-detectors a, b, c and d in the direction of the scan line, and the signal is proportional to

$$t(a-b) + t(c-d),$$

where $t(n-m)$ is the time difference between detector signals of sub-detectors m and n.

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